

7. (Previously Presented) The method of claim 6, further comprising:
determining a threshold as a function of the peak value.

8. (Currently Amended) *An apparatus* ~~A system~~, comprising:
a correlator for computing an ensemble correlation function [[output]] from a plurality of received symbols; [[and]]
a *comparator* ~~subtractor~~, operatively coupled to the correlator, for determining a valid sampling region based on a width of a plateau of the ensemble correlation function [[output]]; and
a sampling position selector, operatively coupled to the correlator, for determining at least one sampling position for at least one symbol based on the valid sampling region.

9. (Currently Amended) The *system* of claim 8, further comprising:
a filter, operatively coupled to the correlator, for filtering the ensemble correlation function [[output]].

10. (Currently Amended) The *system* of claim 9, further comprising:
a maximum detector, operatively coupled to the filter, for determining a peak value included in the filtered ensemble correlation function [[output]].

11. (Currently Amended) The *system* of claim 8, further comprising:
a *comparator* ~~subtractor~~ [[operatively coupled to]] ~~operatively coupling the correlator to~~ *comparator* ~~the subtractor and the sampling-position selector, for comparing the ensemble~~ ~~subtracting a width of~~ ~~correlation function [[output]] to a threshold to define the valid sampling region~~ ~~length of a cyclic extension of a symbol to obtain an estimate of a~~ ~~delay-spread.~~ *apparatus*

12. (Original) The *system* of claim 8, for use in a receiver.

13. (Original) The *system* of claim 12, wherein the receiver is wireless.

14. (Original) The ~~system~~^{apparatus} of claim 8, further comprising:
at least one phase locked loop for tracking edges of the plateau.

15. (Currently Amended) A method for estimating [[delay spread]] delay-spread in a communication system using cyclic extension of a plurality of symbols, the method comprising:
computing an ensemble correlation function [[output]] from the plurality of symbols; and
using the ensemble correlation function [[output]] to estimate the delay-spread.

16. (Currently Amended) The method of claim 15, further comprising:
comparing the ensemble correlation function [[output]] to a threshold to define a valid sampling region; and
subtracting a width of the valid sampling region from a length of the cyclic extension of a symbol to obtain the estimate of the [[delay spread]] delay-spread.

17. (Currently Amended) The method of claim 15, further comprising:
filtering the ensemble correlation function [[output]].

18. (Currently Amended) The method of claim 17, further comprising:
using a median filter to filter the ensemble correlation function [[output]].

19. (Currently Amended) The method of claim 15, further comprising:
determining a peak value included in the ensemble correlation function [[output]].

20. (Previously Presented) The method of claim 19, further comprising:
determining a threshold as a function of the peak value.
21. (Currently Amended) The method of claim 16, wherein threshold crossing points of the ensemble correlating function [[output]] define the valid sampling region.
22. (Currently Amended) *An apparatus* ~~A system~~ for estimating delay-spread in a communication system using cyclic extension, comprising:
a correlator for computing an ensemble correlation function [[output]] from a plurality of symbols; and
a delay-spread estimator, operatively coupled to the correlator, for estimating the delay-spread.
23. (Currently Amended) The *apparatus* ~~system~~ of claim 22, wherein the [[delay spread]] delay-spread estimator includes:
a comparator, operatively coupled to the correlator, for comparing the ensemble correlation function [[output]] to a threshold to define a valid sampling region; and
a subtractor, operatively coupled to the comparator, for subtracting a width of the valid sampling region from a length of the cyclic extension of [[the]] ~~a~~ symbol to obtain the estimate of the [[delay spread]] delay-spread.
24. (Currently Amended) The *apparatus* ~~system~~ of claim 22, further comprising:
a filter, operatively coupled to the correlator, for filtering the ensemble correlation function [[output]].

25. (Currently Amended) The ~~system~~^{*apparatus*} of claim 24, further comprising:
a maximum detector, operatively coupled to the filter, for determining a peak
value included in the filtered ensemble correlation function [[output]].

26. (Original) The ~~system~~^{*apparatus*} of claim 22, for use in a receiver.

27. (Original) The ~~system~~^{*apparatus*} of claim 26, wherein the receiver is wireless.

28. (Currently Amended) A method for adapting a receiver in a communication
system using cyclic extension of a plurality of symbols, the method comprising:
computing an ensemble correlation function [[output]] from the plurality of
symbols;
determining a multipath channel characteristic based on the
ensemble correlation function [[output]]; and
adapting the receiver based on the multipath channel characteristic.

29. (Original) The method of claim 28, wherein the multipath channel
characteristic is delay-spread.

30. (Original) The method of claim 28, wherein the step of adapting comprises:
determining one or more coefficients of a channel estimation filter in the
receiver.